

CLAIMS

1. A product based on calcium oxide in the form of coarse grains, characterised in that it comprises a protective film coating the grains, based on at least one film-forming compound, which is solid at room temperature and which, during application to the grains, is in solution or emulsion in a vaporisable aqueous phase.
2. A product according to Claim 1, characterised in that the said aqueous phase is water and in that the product also comprises, on the surface of the grains, a thin layer of hydrated lime which is coated with the said hardened protective film.
3. A product according to one or other of Claims 1 and 2, characterised in that the film-forming compound, solid at room temperature, is chosen from the group consisting of vinyl homopolymers or copolymers, acrylic homopolymers or copolymers, paraffins, homopolymers or copolymers of butadiene, isoprene and styrene, silicones and mixtures thereof.
4. A product according to any one of Claims 1 to 3, characterised in that it is formed on the basis of at least one substance complying with the formula  $x\text{CaO} \cdot (1-x)\text{MgO}$ , where  $x$  is equal to or less than 1 but greater than 0.
5. A product according to any one of Claims 1 to 4, characterised in that it is in the form of grains with a size of at least 10 mm.
6. A product according to any one of Claims 1 to 5, characterised in that the protective film has a thickness of less than 100  $\mu\text{m}$ .

7. A method of treating a product based on calcium oxide in the form of coarse grains, characterised in that it comprises

- an application, on the surface of the said grains, of a solution or emulsion in an aqueous phase of at least one film-forming compound, solid at room temperature,
- evaporation of the aqueous phase, and
- hardening of a protective film of the said at least one film-forming compound, coating the grains.

8. A method according to Claim 7, characterised in that the method comprises, during the above mentioned application, an exothermic reaction between some of the aqueous phase and the calcium oxide contained in the grains, formation of a thin layer of hydrated lime on the surface of the grains, and instantaneous evaporation of the remaining aqueous phase caused by an increase in temperature resulting from the said exothermic reaction, which gives rise to a rapid hardening of the said protective film.

9. A method according to one or other of Claims 7 and 8, characterised in that the method comprises, during and/or after the said application, a heating of the product in order to evaporate the aqueous phase.

10. A method according to any one of Claims 7 to 9, characterised in that the application is implemented by spraying, nebulisation or atomisation of the said solution or emulsion on the said grains.

Add A.1